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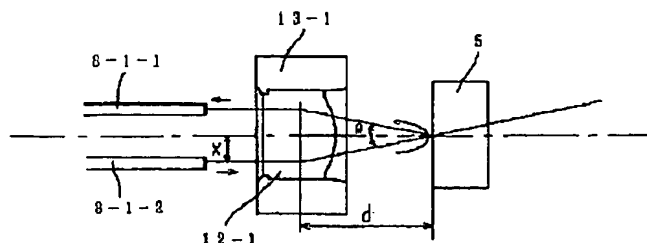
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TITLE : TWO-FIBER COLLIMATOR
STRUCTURE, OPTICAL CIRCUIT
MODULE AND OPTICAL AMPLIFIER



ABSTRACT : PROBLEM TO BE SOLVED: To provide a small-sized two-fiber collimator at a low cost having high reliability by constituting the collimator of two-fiber ferrule containing two pieces of fibers of an input side, respectively specified lens and an optical filter.

SOLUTION: The two-fiber ferrule makes outgoing light from two pieces of fibers of the fiber 8-1-1 being a signal light transmission line and the fiber 8-1-2 being an excitation light transmission line parallel to its own central line in an exit of its hole. A lens 12-1 refracts two pieces of outgoing light so that optical paths of two outgoing light intersect at a point on the central line. The optical filter 5 is arranged so that an intersection point of the optical paths of two outgoing light on the central line of the lens 12-1 is formed on an optical film, and the optical film is preferably made to be perpendicular to the central line of the lens 12-1. Then, the excitation light outgoing from one side fiber 8-1-2 is made the collimated light by the lens 12-1 to be emitted, and is reflected at the center of the optical film of the optical filter 5 to be coupled with the light from another side fiber 8-1-1.

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